Information technologies in management

Zakirova Sayora Abdulhakovna[1], Zunnunova Umida Gulomovna[2]

[1]The head of department "Informatics and management " National Institute of fine arts and design named after Kamoliddin Behzod, Uzbekistan

[2]An associated professor of department "Informatics and management " National Institute of fine arts and design named after Kamoliddin Behzod, Uzbekistan

Email: zakirova_s@umail.uz

ABSTRACT

Rapid development of information and computer technologies, improvement of technical platform and emergence of completely new classes of software products have led to changes in approaches to automation of production management. This article addresses some of the issues of using information technology in management.

Keywords: information technology, computer, management, production management, technology, keyboard, mouse, scanner.

1. INTRODUCTION

The main direction of the restructuring of management and its radical improvement, adaptation to modern conditions has become the massive use of the latest computer and telecommunication equipment, the formation on its basis of highly effective information management technologies. Means and methods of applied informatics are used in management and marketing. New technologies based on computer technology require radical changes in the organizational structures of management, its regulations, human resources, documentation system, recording and transmission of information. Of particular importance is the introduction of information management, which significantly expands the possibilities for companies to use information resources. The development of information management is associated with the organization of a data and knowledge processing system, their consistent development to the level of integrated automated control systems, covering vertically and horizontally all levels and links of production and marketing. In modern conditions, effective management is a valuable resource of the organization, along with financial, material, human and other resources.

Consequently, improving the efficiency of managerial activity is becoming one of the areas for improving the activities of the enterprise as a whole. The most obvious way to increase the efficiency of the labor process is to automate it. But what is really, say, for a strictly formalized production process, is by no means so obvious for such an elegant sphere as management. The difficulties encountered in solving the problem of automated support for managerial work are related to its specificity. Managerial work is distinguished by complexity and variety, the presence of a large number of forms and types, multilateral relations with various phenomena and processes. First of all, this is a creative and intellectual work. At first glance, most of it does not lend itself to any formalization at all. Therefore, the automation of managerial activity was initially associated only with the automation of some auxiliary, routine operations. But the rapid development of information computer technologies, the improvement of the technical platform and the emergence of fundamentally new classes of software products have led to a change in approaches to the automation of production management today. The very concept of "technology" is used in production and is defined as a system of interconnected methods of processing materials and methods of manufacturing products in the production process.

2. SIGNIFICANCE OF THE SYSTEM

Management activity in any organization is also based on the processing of information and the production of new information, which allows us to talk about the availability of technology for converting source data into output information, i.e. Information technology is a system of methods and methods of

collection. Transmission, accumulation, processing, storage, presentation and use of information based on the use of technical means. Information technology in accordance with the difference in information processes can be classified into technology:• collection of information;• Information transfer;• Information processing;• Information storage;• Submission of information;• Use of information Each specific information process can be implemented by a separate technology using its own technological base, technical equipment management system and organizational and methodological support. Management activity is based on the implementation of almost all of the listed types of information technologies in accordance with the sequence and content of the individual stages of the decision-making process.

Therefore, modern information technologies for management activities are based on the integrated use of various types of information processes on the basis of a single technical complex, the basis of which is computer hardware. In this regard, very often under modern or new information technologies understand computer technology. The development of information technology is increasing. So, until the second half of the XIX century. The basis of information technology was paper, an inkwell, and an accounting, statistical, and account book. Communication (communication) is carried out by sending documents to the addressee: columns, scrolls - with a courier.

3. LITERATURE SURVEY

Serious changes in the information technology of this period were played by the transition from parchment to paper, which led to changes in the technology of paperwork, their completion in documentary processes, created the ground for the beginning of the formation of office accounting and reference arrays. Manual information technology was replaced by mechanized technology at the end of the 19th century. The inventions of a typewriter, telegraph, telephone — all this served as the basis for changes in the creation, duplication, processing of managerial information and, as a result, productivity. But mechanized technology did not lead to significant changes in the organized structure of existing institutions, the technology of working with documents. The introduction of electrical technology, based on the widespread use of electric typewriters with replaceable fonts, significant random access memory, copy machines on plain paper, tape recorders and voice recorders, has improved institutional work by improving the quality, quantity and speed of processing documents. Many institutions have been working on electrical technology to date. The appearance in the second half of the 1960s of an electronic computer on the periphery of institutional activity, computer centers began to shift the focus in information technology to processing not the form, but the content of the information. This was the beginning of the formation of electronic, or computer, technology. With the advent of personal computers, the rapid increase in their speed, memory, software, there is a fundamental modernization of the idea of automation control. But it becomes obvious that the most modern computer in the foreseeable future will not be able to replace a person.

4. METHODOLOGY

At present, we are talking about a structural man-machine control unit that optimizes in the process of work: the capabilities of computers are expanded by structuring the tasks to be performed by the user and replenishing her knowledge base, and the capabilities of the user are due to the automation of those tasks that were previously expedient to transfer to the computer economic or technical considerations. Accessibility of acquisitions, the possibility of multi-purpose use introduces computer technology into the standard office clerical work. As part of a set of technical means for providing information technology, computer equipment and organizational equipment are allocated.

Modern office computer equipment can be divided into personal computers and corporate computers. Personal computers are computing systems, all of whose resources are fully aimed at ensuring the activities of one workplace of an administrative employee. This is the most numerous class of computer technology, which includes the personal computer IBM PS and compatible with it, as well as Macintosh personal computers from Apple. Corporate computers are multi-user systems that have a central unit with great computing power and significant information resources, to which a large number of workplaces with minimal equipment are connected: a video terminal, a keyboard, a mouse-type positioning device and, possibly, a printing device. The modern area of using corporate computers is the implementation of information technologies, providing management activities in large financial and

production systems serving a large number of users within the framework of one function: exchange and banking systems, booking and selling tickets for providing transportation services to the population, etc.

5. EXPERIMENTAL RESULTS

The intensive development of modern information technologies is connected precisely with the widespread use of personal computers in the early 80s, combining relative cheapness with wide enough possibilities for a non-professional user. Currently, the prevailing trend is the integration of various computing systems into computer networks of various sizes, which allows the integration of information and computing resources for the most efficient implementation of information technologies. The fundamental differences between computer information technologies and pre-existing ones are not only automation of processes, changes in the form or location of information, but also changes in its content. We can distinguish two development strategies for the implementation of modern information technologies in management activities. The first strategy is that information technology adapts to the organizational structure in its existing form, and the existing working methods are modernized:

- primarily jobs are rationalized, functions are redistributed among technical workers (operators), specialists (administrators);

- there is a merger of the functions of collecting and processing information

- the physical flow of documents

- with the decision-making function

- the information flow;

- Communication issues are given a secondary role. The second strategy - the organizational structure is being modernized so that information technology gives the greatest effect:- the main strategy is the maximum development of communications and the development of new organizational relationships that were previously not economically feasible;- new jobs are introduced, old positions are eliminated, the projected reallocation of duties is carried out by almost all employees of the company;- a new regulatory and methodological support for the organization of documentation is being developed, continuous retraining of employees in the work on new technologies is being conducted;- the productivity of the organizational structure increases, since archival data is rationally distributed, the amount of information circulating through the system channel is reduced, and the efficiency of each managerial level and the volume of tasks are balanced. So, the first strategy focuses on the existing structure of the institution, while the degree of risk from implementation is minimized, because the costs are minimal and the organizational structure is not rationalized; the second - to the future structure, in which the system expands strictly in accordance with the needs, but in the given parameters. For both strategies, the approach to using information technology is fundamentally changing: it becomes the basis for the typical equipment of a workplace in an office. This closes the gap between the information and organizational structure. New information technology is characterized by:- user work in data manipulation mode. The user must "see" - output means: screen. Printer - and "act" - output means: keyboard, mouse, scanner;- end-to-end information support at all stages of information passing on the basis of an integrated database, providing a single unified form of presentation, storage, retrieval, recovery and protection of data;- paperless document processing, in which only the final version of the document is recorded on paper, and the intermediate versions and the necessary data are recorded on the media machine and communicated to the user through the screen of the video terminal;- interactive (dialogue) mode of solving the problem with wide possibilities for the user;- the possibility of adaptive restructuring of the form and method of presenting information in the process of solving the problem.

At the same time, not only technological and methodological integration, but also organizational (physical) integration of information systems and processes in the form of a wide network of automated workstations (APM) due to the universality of the hardware and software used. Modern companies use information technology to improve working methods. As a result, the organizational structure of the company changes, new organizational relationships are developed that were previously not economically feasible. That is why information technology is a very promising and effective area for investment. Changes in the organization and management technology under the influence of information technology and automated offices occur in the following areas.

6. CONCLUSION AND FUTURE WORK

First, the organization and technique of information support for the leader are fundamentally changing. Of particular importance is the massive introduction of mini- and microcomputers, personal computers as components of information systems associated with a network of data banks. At the same time, work on the collection, processing and dissemination of information is carried out by convenient human-computer interfaces that do not require special training (natural language dialogs, voice input-output of information, etc.). The technology for storing and processing information is also changing significantly. The systems for receiving, organizing, storing and transmitting information are automated, which maintain the purity of information channels and do not allow incomplete information, duplication, input of information designed for other management levels, etc. Secondly, the automation of certain functions of the head. The number of effectively functioning automated systems covering production, business, organizational and technological processes, etc., has increased. The greater part of the work in the preparation of plans is transferred to the computer. At the same time, the quality of plans developed using microcomputers at a lower level of control is significantly improved. In addition, plans for individual subsystems of the control system are clearly consistent.

REFERENCES

1. Myasoedov S.P. Business management in various business cultures, 2009, 320 p.
2. Golovleva E. L. Fundamentals of intercultural communication, 2008.
3. Nigel Holden Cross-Cultural Management: A Knowledge Management Perspective 2002 FT / Prentice-Hall, Pearson Education, London
4. Golovleva E. L. Fundamentals of intercultural communication, 2008. 224 p. Dimensions of national Cultures (link not available).
5. Geert Hofstede. Date of treatment January 16, 2016. Archived January 19, 2016.
6. Mamajonova G.K. Bioethics-A component of culture: development tendencies and basic features //International Journal on Integrated Education. – 2019. – Т. 2. – №. 4. – С. 116-118.
7. Mamajonova G.K. The role of bioethics in fostering the family's spiritual foundations // International Journal of Advanced Science and Technology. – 2019. – Т. 28. - №. 12. – С. 397-401.
8. Mamajonova G. K. BIOETHICS IS APPLIED ETHICS //Теория и практика современной науки. – 2018. – №. 1. – С. 29-31.